

CLAIMS:

1. A polymer composite molded body having a surface,
5 comprising:

a polymer matrix;

at least one sheet of a fiber cloth disposed in the
polymer matrix, wherein the fiber cloth is oriented along
the surface of the polymer composite molded body; and

10 fibers disposed in the polymer matrix, wherein the
fibers are oriented in a direction crossing with the fiber
cloth.

2. The polymer composite molded body of claim 1,
15 wherein the fibers are oriented in a direction
substantially perpendicular to each of the fiber cloth.

3. The polymer composite molded body of claim 1,
wherein the fibers are oriented by a magnetic field.
20

4. The polymer composite molded body of claim 1,
wherein the fibers have an anisotropic diamagnetic
susceptibility of 1×10^{-9} emu/g or more.

25 5. The polymer composite molded body of claim 1,
wherein the fibers have a length of 10 mm or less.

6. The polymer composite molded body of claim 1,
wherein the fibers and the fiber cloth independently
30 comprise at least one selected from carbon fibers, metal
fibers, glass fibers, ceramic fibers, and organic fibers.

7. A method for producing a polymer composite molded
body having a surface and containing fibers and at least
35 one sheet of a fiber cloth in a polymer matrix, the method

comprising steps of:

preparing a molding die having a cavity with a shape corresponding to the polymer composite molded body to be produced;

5 disposing the fiber cloth in the cavity such that the fiber cloth is aligned along the surface of the polymer composite molded body;

filling the cavity with a polymer composition containing the fibers and the polymer matrix, thereby
10 impregnating the polymer composition into each fiber cloth;

applying a magnetic field to the polymer composition impregnated in the fiber cloth to orient the fibers in the polymer composition such that the fibers are oriented in a direction crossing with the fiber cloth; and

15 solidifying the polymer composition with the fibers being oriented therein.

8. The method of claim 7, further comprising a step of securing the fiber cloth within the cavity, after the
20 step of disposing the fiber cloth in the cavity.

9. The method of claim 7, further comprising a step of removing bubbles in the polymer composition by either of compressing and decompressing, after the step of
25 impregnating the polymer composition into the fiber cloth.

10. The method of claim 7, wherein the fibers are oriented in a direction substantially perpendicular to the fiber cloth.

30

11. The method of claim 7, wherein the magnetic field is applied by either of a permanent magnet and an electromagnet.

35 12. The method of claim 7, wherein a flux density in

the magnetic field is in the range of from 0.1 to 30 tesla.